

Texas Success Initiative
Sample Questions
Elementary Algebra and Functions

These practice tests are solely intended to complement your studying.
There is no guarantee, implied or otherwise, that these alone will enable you to pass.

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) $6234 + 583 + 47 + 8847$

- A) 15,711 B) 14,701
C) 15,601 D) 14,611

2)

$$\begin{array}{r} 8847 \\ - 4485 \\ \hline \end{array}$$

- A) 4362 B) 4272
C) 8362 D) 4352

3) $(560)(20)$

- A) 11,196 B) 11,200
C) 11,210 D) 11,190

4) A case of candy bars has 2 layers of candy bars. In each layer are 8 rows with 14 candy bars in each row. Find how many candy bars are in a case.

- A) 224 candy bars B) 223 candy bars
C) 234 candy bars D) 214 candy bars

5) $9955 \div 55$

- A) 181 R 46 B) 182
C) 182 R 45 D) 181

6) During the recent Homecoming football game, State U. scored the following: 6 six-point touchdowns, 6 extra points, 4 three-point field goals, and 1 two-point safety. What was State U.'s final score?

- A) 27 points B) 56 points
C) 26 points D) 18 points

7) $\frac{5}{8} + \frac{1}{8}$

- A) $\frac{2}{3}$ B) $\frac{4}{5}$ C) $\frac{3}{4}$ D) $\frac{2}{4}$

8) $\frac{20}{23} - \frac{2}{23}$

- A) $\frac{18}{46}$ B) $\frac{18}{23}$
C) $\frac{23}{18}$ D) 18

9) $\frac{1}{15} + \frac{7}{12}$

- A) $\frac{11}{60}$ B) $\frac{2}{15}$
C) $\frac{8}{15}$ D) $\frac{13}{20}$

10) $\frac{7}{9} - \frac{1}{2}$

- A) $\frac{1}{3}$ B) $\frac{2}{3}$
C) $\frac{5}{18}$ D) $\frac{5}{9}$

11) Johanna has a $\frac{3}{4}$ - lb mixture of cashews and peanuts that includes $\frac{7}{16}$ lb of cashews. How many pounds of peanuts are in the mixture?

- A) $\frac{5}{4}$ lb B) $\frac{5}{16}$ lb
C) $\frac{5}{64}$ lb D) $\frac{1}{3}$ lb

12) $-\frac{1}{2} \div 6$

- A) - 3 B) $-\frac{7}{3}$
C) $-\frac{1}{6}$ D) $-\frac{1}{12}$

13) $2\frac{2}{5} \cdot 4\frac{1}{6}$

A) 10

C) 15

B) $8\frac{9}{30}$

D) 11

14) $4\frac{1}{7} \div 1\frac{5}{7}$

A) $3\frac{5}{12}$

C) $2\frac{5}{12}$

B) $2\frac{6}{12}$

D) $2\frac{5}{11}$

15) $5\frac{4}{5} + 7\frac{1}{6}$

A) $13\frac{29}{30}$

C) $5\frac{29}{30}$

B) $11\frac{29}{30}$

D) $12\frac{29}{30}$

16) $11\frac{4}{5} - 2\frac{3}{5}$

A) $9\frac{7}{5}$

C) $9\frac{1}{5}$

B) $9\frac{7}{10}$

D) $13\frac{1}{5}$

17) $\frac{3}{8} \cdot \frac{1}{3} \cdot \frac{7}{8}$

A) $\frac{3}{64}$

C) $\frac{7}{64}$

B) $\frac{63}{64}$

D) $\frac{7}{19}$

18) $(-0.89)(9.43)$

A) -0.83927

C) -0.083927

B) -8.3927

D) -83.927

19) $27 \div (0.03)$

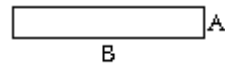
A) 90

C) 9

B) 900

D) 9000

- 20) Find the area of the rectangle. Write the answer in simplest form. Recall that the area = length \cdot width.



$A = \frac{3}{5}$ mile

$B = 5$ miles

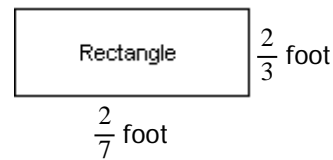
A) $\frac{15}{5}$ sq mi

C) $\frac{8}{5}$ sq mi

B) $\frac{28}{5}$ sq mi

D) 3 sq mi

- 21) Find the perimeter and area of the figure.



A) perimeter: $1\frac{19}{21}$ ft; area: $\frac{1}{16}$ sq ft

B) perimeter: $1\frac{19}{21}$ ft; area: $\frac{4}{21}$ sq ft

C) perimeter: $1\frac{19}{21}$ in; area: $\frac{4}{21}$ sq ft;

D) perimeter: $\frac{20}{21}$ ft; area: $\frac{7}{48}$ sq ft

- 22) On a recent trip, Asha drove 246 miles on $16\frac{1}{9}$

gallons of gasoline. How many miles would we expect the car to travel on 1 gallon of gas?

A) $3963\frac{1}{3}$ mi

C) $437\frac{4}{9}$ mi

B) $\frac{145}{2214}$ mi

D) $15\frac{39}{145}$ mi

23) $2.083 + 3.42 + 10.257$

A) 15.76

C) -4.754

B) 8.92

D) 16.687

24) $9.61 - 31.35$

A) 40.96

C) -21.74

B) -11.74

D) 21.74

Answer Key

Testname: TSI ELEMENTARY ALGEBRA AND FUNCTIONS

- 1) A
- 2) A
- 3) B
- 4) A
- 5) D
- 6) B
- 7) C
- 8) B
- 9) D
- 10) C
- 11) B
- 12) D
- 13) A
- 14) C
- 15) D
- 16) C
- 17) C
- 18) B
- 19) B
- 20) D
- 21) B
- 22) D
- 23) A
- 24) C